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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,392	07/07/2004	Douglas A. Low		5142
29859	7590	12/21/2007		
DOUGLAS A. LOW 136 STOLP AVE. SYRACUSE, NY 13207			EXAMINER WEINSTEIN, LEONARD J	
			ART UNIT 3746	PAPER NUMBER
			MAIL DATE 12/21/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/710,392		LOW, DOUGLAS A.	
	Examiner		Art Unit	
	Leonard J. Weinstein		3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment of August 20, 2007. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.
2. The examiner acknowledges the amendments to claims 1 and 2.

Claim Objections

3. The amendment to the claims filed on August 20, 2007 does not comply with the requirements of 37 CFR 1.121(c) because a claim listing designating which claims have been amended and/or presented in original form, and claim text with markings in the amended claims, have not been provided. Amendments to the claims filed on or after July 30, 2003 must comply with 37 CFR 1.121(c) which states:

(c) *Claims.* Amendments to a claim must be made by rewriting the entire claim with all changes (*e.g.*, additions and deletions) as indicated in this subsection, except when the claim is being canceled. Each amendment document that includes a change to an existing claim, cancellation of an existing claim or addition of a new claim, must include a complete listing of all claims ever presented, including the text of all pending and withdrawn claims, in the application. The claim listing, including the text of the claims, in the amendment document will serve to replace all prior versions of the claims, in the application. In the claim listing, the status of every claim must be indicated after its claim number by using one of the following identifiers in a parenthetical expression: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).

(1) *Claim listing.* All of the claims presented in a claim listing shall be presented in ascending numerical order. Consecutive claims having the same status of "canceled" or "not entered" may be aggregated into one statement (*e.g.*, Claims 1–5 (canceled)). The claim listing shall commence on a separate sheet of the amendment document and the sheet(s) that contain the text of any part of the claims shall not contain any other part of the amendment.

(2) *When claim text with markings is required.* All claims being currently amended in an amendment paper shall be presented in the claim listing, indicate a status of "currently amended," and be submitted with markings to indicate the changes that have been made relative to the immediate prior version of the claims. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of

any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. Only claims having the status of "currently amended," or "withdrawn" if also being amended, shall include markings. If a withdrawn claim is currently amended, its status in the claim listing may be identified as "withdrawn—currently amended."

(3) *When claim text in clean version is required.* The text of all pending claims not being currently amended shall be presented in the claim listing in clean version, *i.e.*, without any markings in the presentation of text. The presentation of a clean version of any claim having the status of "original," "withdrawn" or "previously presented" will constitute an assertion that it has not been changed relative to the immediate prior version, except to omit markings that may have been present in the immediate prior version of the claims of the status of "withdrawn" or "previously presented." Any claim added by amendment must be indicated with the status of "new" and presented in clean version, *i.e.*, without any underlining.

(4) *When claim text shall not be presented; canceling a claim.*

(i) No claim text shall be presented for any claim in the claim listing with the status of "canceled" or "not entered."

(ii) Cancellation of a claim shall be effected by an instruction to cancel a particular claim number. Identifying the status of a claim in the claim listing as "canceled" will constitute an instruction to cancel the claim.

(5) *Reinstatement of previously canceled claim.* A claim which was previously canceled may be reinstated only by adding the claim as a "new" claim with a new claim number.

4. It is noted by the examiner that any amendment in response to the office action on the merits that follows should comply with the requirements of 37 CFR 1.121(c).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smull US 6,473,004 in view of Mcpherson et al. US2005/0184879 (filed February 19, 2004). Smull teaches all the limitations for a apparatus for determining an operational status for a bilge pump, one of elements 80-85, consisting of: (claim 1) an electronic circuit 11 having timing and logic, via element 100 (col. 5 ll. 25-31) to determine said operational status of a bilge pump, via elements 14 and 15 (col. 6 ll. 9-24), a water detection means 90-95, a pump state detecting means 14 wherein the state of said bilge pump either being ON when said bilge pump has been activated for any reason or OFF whenever said bilge pump is not activated (col. 10 ll. 19-28), a means 21 for communicating a water sensor input to said electronic circuit 11, a means 21 for communicating said pump state to said electronic circuit 11 (col. 5 ll. 33-37), a means, as defined by elements 16, 17, 18, 20, and 22, of alerting an operator of a system failure (col. 6 ll. 57), a means, via elements 40-49 and element 62, of alerting said operator of said pump state (col. 7 ll. 67 - col. 8 ll. 6; col. 8 ll. 20-21), and a means 63 of alerting said operator of said output flow (col. 10 ll. 41-49); (claim 2) a system failure is indicated whenever said pump state is ON and said water sensor 15 trigger has not been detected for a predetermined amount of time from the instant said pump state changed from OFF to ON indicating said system failure, with an alarm being generated it has been determined that the pump as operated than a programmed time during which the water sensor has not been triggered as the normal operation of the pump is accomplished during this period without the water sensor 15 triggering an alarm (col. 6 ll. 47-57); a pump state is alerted whenever said pump state is ON (col. 9 ll. 48-53); (claim 4) a flow of water is alerted whenever said water detection 15 is indicated (col. 6

ll. 57-61); (claim 5) an optional capacity alert (col. 6 ll. 49-53). The elements listed do not constitute a full and complete list of the of the components of the monitoring system as disclosed by Smull. However, the components not listed here but disclosed in the embodiment of figures 1-4 operatively combine with the elements listed above to exclusively teach "a means of" each limitation as claimed and are therefore are implied by reference to elements of Smull listed above.

Smull fails to teach the following limitation that is taught by Mcpherson for an apparatus for determining an operational state of a pump having a water detection means 27 the downward pointing exit 61 of a pump system 60 indicating that water is present and therefore indicating output flow of said pump system (¶0015). It is noted by the examiner that the monitoring system of Smull consists all the elements as claimed in claim 1 as such: an electronic circuit 11, a water detection means, one of 90-95, a pump state detecting means 14, a means for communicating a flow of water, as defined by elements 15 and 21, a means for communicating a pump state, as defined by elements 14 and 21, a means of alerting a system failure, as defined by elements 16, 17, 18, a means for alerting a pump state 44-49, and a means for alerting a water detection, with element 63.

A modification to Smull such that a water detector such as that of elements 90-95 were provided at an outlet and/or a within a compartment, one of elements 70-75, at a bottom location would provide a signal to a control unit 20 that was always triggered unless a volume of water was present. This arrangement is taught by Mcpherson for the purpose of making a repairs to a pumping system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a liquid sensor at a base near an outlet of a pump

to detect a presence of water in order to maintain a fully functioning pumping system (Mcpherson - ¶0081). (claim 5) and an optional capacity alert (col. 6 ll. 49-53).

Response to Arguments

8. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. Weinstein whose telephone number is (571) 272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Karmer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

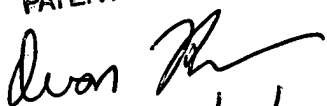
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LJW

DEVON C. KELLEY
PATENT EXAMINER

12/19/07